

# Health Care: External Trends

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- ▶ Why focus on health care?
  - U.S. spends ~\$1 trillion (14% of GDP) on health care
  - \$140 B associated with measurement
  - U.S. health care companies are global leaders
  - Health care identified as a national priority
- ▶ High growth rates in markets and high R&D intensity
- ▶ Large cost drivers for increased efficiency
- ▶ Growing recognition of the important role of the physical sciences

# Health Care: Strategic Need

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- ▶ Research and commercial development outpacing improvements in the measurement infrastructure
- ▶ Diverse technology sectors relate to NIST competencies
  - Emerging clinical diagnostics
  - Point of care testing
  - Imaging
  - Therapy
  - Prostheses and implants
  - Tissue engineering
  - Research infrastructure
  - Health care delivery and infrastructure
  - *Bioinformatics*

# Health Care: NIST Contribution

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- ▶ Measurements and standards for research, diagnosis and therapy
- ▶ Measurement methods and data for research tools
- ▶ Standards for interoperability and security of IT systems
- ▶ Impartial technical advice to industry groups and regulatory bodies

# Health Care: Anticipated Impact

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- ▶ Faster and better regulatory decisions
- ▶ Faster introduction of new technologies
- ▶ Improved confidence in research and clinical conclusions
- ▶ More efficient studies and diagnoses
- ▶ Better decisions throughout clinical practice
- ▶ Higher quality health care